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Agenda Item 3 Global and Regional Developments





PBN Documentation Framework



- PANS Ops(Doc 8168) Volume I 6th Edition Amendment 9, 2018
- PANS Ops(Doc 8168) Volume II 7th Edition, 2020
- PANS Ops(Doc 8168) Volume III 1st Edition, 2018
- PBN Manual (Doc 9613) 4th Edition
- RNP AR Procedure Design Manual (Doc 9905), 2nd Edition, 2016
- PBN Ops Approval Manual (Doc 9997) 2nd Edition, 2015
- Manual on PBN Use in Airspace Design (Doc 9992) 1st Edition 2013
- CDO Manual (Doc 9931) 1st Edition, 2010
- CCO Manual (Doc 9993) 1st Edition 2013
- GNSS Manual (Doc 9849) 3rd Edition 2017
- Procedure QA Manual (Vol 1 to Vol 6) (Doc 9906)



Global Developments

- Proposed amendment to PANS-ATM relating to approach phraseology arising from the fifth meeting of the Air Traffic Management Operations Panel (ATMOPSP/5);
- Proposed amendments to Annex 6, Part I and PANS-OPS, Volumes I and III, related to the use of RNAV on conventional routes and procedures and flight data analysis programmes (FDAP) arising from the seventh meeting of the Flight Operations Panel (FLTOSP/7)
- Approval of Amendment 1 to the Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volume III — Aircraft Operating Procedures
- Approval of Amendment 9 to the Procedures for Air Navigation Services — Aircraft Operations, Volume I — Flight Procedures and Amendment 9 to Volume II — Construction of Visual and Instrument Flight Procedures (PANS-OPS, Doc 8168)
- Proposals for the amendment of Annex 10, Volume I to support the introduction of dual-frequency, multiconstellation (DFMC) global navigation satellite system (GNSS)



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Regional Developments: MID FPP updates



MIDFPP, review and update

- **HISTORY:**

- It was recognized the need for the MIDFPP since 2016, by many levels (ministerial, DGCA and SGs meetings), to foster the PBN implementation in the region.
- The level of PBN implementation is below the global level and below the regional targets.
- The MIDFPP will provide the assistance to States to develop sustainable capability in the instrument flight procedures (IFP) design, PBN airspace concepts and PBN OPS approval, including regulatory oversight, so as to support the States to meet their commitments under Assembly Resolutions A37-11 for Performance Based Navigation (PBN) implementation and the regional requirements, and comply with ICAO provisions related to flight procedure design and PBN.



- **REGIONAL CHALLENGES:**

- Insufficient number of procedure designers;
- Insufficient design workloads in some States to attain or maintain proficiency;
- Lack of airspace and procedure design training: initial, On-the-Job Training (OJT), and/or recurrent;
- Lack of knowledge/experience to integrate procedure design efficiently into airspace design/AIM;
- Insufficient procedure design organization to perform quality assurance (QA);
- Insufficient expertise in procedure design organization to provide the services;
- Lack of procedure design and obstacle data automation systems;
- Lack of operational approval expertise to obtain proper operational approval and to perform oversight activities on air operators;
- Lack of regulatory expertise to perform oversight activities on service providers and IFPs publications; and
- Lack of ATC/ATM training related to PBN implementation.



- **STRATEGIC OBJECTIVES OF THE PROGRAMME**
 - Building MIDFPP human resources (pool of experts);
 - Regulatory oversight framework;
 - Meeting the targets set out in the MID Region Air Navigation Strategy related to PBN;
 - Training Programmes.



- **PROVIDED SERVICES:**

- assisting States with sufficient number of procedures to establish a sustainable internal procedure design capability capable of meeting the requirements of PANS-OPS and their responsibility for the quality of their procedures;
- providing the appropriate level of technical expertise necessary to enable States that do not have the volume of procedures necessary to sustain an internal procedure design capability; and
- providing a vehicle to improve quality in the States' procedure design process through access to procedure design automation solutions and associated data storage; and assisting States with airspace design and operational approval functions.
- assist State's procedure and airspace planners in developing their Instrument Flight Procedures (IFP) with priority for PBN procedures;



- **PROVIDED SERVICES:**

- assist State with the development of a Quality Assurance (QA) system for IFP, including flight procedure regulatory approval;
- provide PANS-OPS refresher, recurrent and initial training courses and OJT to procedure designers, remotely, on-site or at the MID FPP location;
- provide training course and OJT on QA for IFP including flight procedure regulatory approval;
- provide training course and OJT on operators' approval for PBN operations;
- assist State in PBN Plan implementation through operational assessment, business case, and activity planning for PBN Implementation;
- assist States in the design of IAPs, SIDs, STARs, Continuous Climb Operations (CCO) and Continuous Descent Operations (CDO);



- **PROVIDED SERVICES:**

- assist State in developing PBN-related regulations;
- develop procedures implementation for States that have no or little procedure design capability;
- assist State with data origination and validation;
- assist State with ground and flight validation;
- assist State in operators' approval for PBN operations;
- provide training courses for air traffic controllers about PBN flight procedures operations;
- provide State with any other associated assistance, as required;
- provide training courses for newly recruited flight procedures designers in accordance with ICAO Doc 9906;
- assist States with the estimation of environmental benefit accrued from the implementation of instrument flight procedures/PBN procedures; and



- **PROVIDED SERVICES:**
 - assist States with PBN airspace design.
 - provide training courses for newly recruited flight procedures designers in accordance with ICAO Doc 9906;
 - assist States with the estimation of environmental benefit accrued from the implementation of instrument flight procedures/PBN procedures; and
 - assist States with PBN airspace design.
 - provide States access to procedure design software applications at the MID FPP location; and
 - provide States access to available databases for training purposes.



- **PARTICIPATING GROUP**

The programme will provide its services to participants, according to their group:

- Active States,
- User States,
- Donors (States, ORGs, entities...) could also participate under a specific agreement,
- Observer States.



- **1ST YEAR WORK PLAN, TARGETS:**
 - Commence Phase I MIDFPP operations;
 - Conduct 4 Training activities; and
 - Conduct 2 Project-orientated implementation support activities.



- **THE UPDATES:**

- UAE hosting the Office,
- MIDFPP Manager was recruited,
- 1st MIDFPP SC/1 meeting is planned end of **26 – 27 January 2022** (Virtual).



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THANK YOU